

Appl. No. 10/783,619

Reply to Office Action of 06/29/2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-59. (Canceled).

60. (New) A method of treating, preventing, or ameliorating a pathological condition in a mammal, wherein said pathological condition is associated with a pathological deficiency in the oxygen-carrying component of the blood, comprising a step of inducing erythrocytic differentiation and hemoglobin expression by administering to said mammal a pharmaceutical composition of claim 70.

61. (New) The method of claim 60, wherein said pathological deficiency is sickle cell anemia or a type of thalassemia.

62. (New) A method of making the pharmaceutical composition of claim 70, comprising a step of extracting dried parts of *Trichosanthes* with a solvent of a polarity index greater than 2.

63. (New) The method of claim 62, wherein said solvent is water or a polar organic solvent or a mixture of water and one or more polar organic solvents.

64. (New) The method of claim 63, wherein said solvent is 50-70% ethanol, by volume.

65 (New) The method of claim 62, wherein said process further comprises a step of removing insoluble materials by filtrating and centrifugation to obtain a clear supernatant, and a step of concentrating said clear supernatant to obtain a syrup.

66. (New) The method of claim 65, wherein said process further comprises a step of extracting said syrup with another polar solvent to obtain an liquid extract; said another polar

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solvent being water or a polar organic solvent or a mixture of water and one or more polar organic solvents.

67. (New) The method of claim 66, wherein said another polar solvent is substantially pure ethanol.

68. (New) The method of claim 67, wherein said process further comprises a step of concentrating a clear supernatant of said liquid extract to obtain a another syrup.

69. (New) The method of claim 62, wherein said process further comprises a step of obtaining a substantially pure chemical compound.

70. (New) A pharmaceutical composition, comprising an extract from a plant of *Trichosanthes* and being associated with an indication for its usefulness in treating, preventing, or ameliorating a pathological condition associated with hemoglobinopathies in a mammal.

71. (New) The pharmaceutical composition of claim 70, wherein said hemoglobinopathies is sickle cell anemia, hemoglobin SC disease, hemoglobin SS disease, sickle beta-thalassemia, or a thalassemia syndrome.

72. (New) The pharmaceutical composition of claim 70, wherein said extract consists of essentially a single compound.